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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,636	03/17/2004	Chang-Lien Wu	REAP0049USA	2635
27765	7590	07/19/2006	EXAMINER	
NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION			KIM, HONG CHONG	
P.O. BOX 506			ART UNIT	
MERRIFIELD, VA 22116			PAPER NUMBER	
			2185	

DATE MAILED: 07/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/708,636	WU ET AL.	
	Examiner	Art Unit	
	Hong C. Kim	2185	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>7/11/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

1. Claims 13-22 are presented for examination. This office action is in response to the amendment filed on 6/15/2006.
2. The status of the referenced U.S. applications must be updated accordingly (e.g., U.S. Patent Application Serial No. ###/###,### filed Sept. 07, 1990, now abandoned; ..., now U.S. Patent #,###,### issued Jan. 01, 1994; or This application is a continuation of Serial Number ###/###,###, filed on December 01, 1990, now abandoned; ...etc.) in the Related Applications section and in any other corresponding area in the specification, if any.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 7/11/2006 is being considered by the examiner.

Drawings

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "a portion of the memory", "updating is performed before the BIST performed", "completely through with the entirety of the memory" and "a first and a second defective portion of the memory" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 13-18 and 22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to

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one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. As to claim 13, it appears that added limitations "wherein each entry of the linked list corresponds to a portion of the memory", "a portion of the memory", and "a first defective portion of the memory" were not described in the specification at the time the application was filed. As to claim 16, it appears that added limitations "updating is performed before the BIST performed" and "completely through with the entirety of the memory" were not described in the specification at the time the application was filed. As to claim 22, it appears that added limitation "a first and a second defective portion of the memory" was not described in the specification at the time the application was filed.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 13-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Kim et al. (Kim) US Patent No. 6,781,898 or rejected under 35 U.S.C. 102(a) as being anticipated by Chin US Patent Pub. No. 2003/0145250.

As to claim 13, Kim discloses a method for generating a linked list (col. 2 lines 8+ and Fig. 2 Ref. 170) corresponding to a memory in an electronic device (col. 1 line 23), comprises forming a linked list (Fig. 1b) for the memory, wherein each entry of the linked list corresponds to a portion of the memory (Fig. 1b); performing a built-in self test (BIST) (Fig. 2 Refs 172 and 182) on the memory to identify a first defective portion of the memory (Fig. 3 Ref. 220); and updating the linked list to remove from the linked list the entry of the linked list corresponding to the identified first defective portion of the memory (Fig. 3 and col. 6 lines 36-44) .

Alternatively, Chin discloses a method for generating a linked list (Fig. 3) corresponding to a memory in an electronic device (block 4), comprises forming a linked list for the memory (fig. 3 and block 11), wherein each entry of the linked list corresponds to a portion of the memory; performing a built-in self test (BIST) (block 11) on the memory to identify a first defective portion of the memory; and updating the linked list (block 12-15 and Fig. 4) to remove from the linked list the entry of the linked list corresponding to the identified first defective portion of the memory.

As to claim 14, Kim discloses the invention as claimed above. Kim further discloses wherein the memory being tested in the above step is used for storing the linked list (Fig. 2 Refs. 150 & 166 and Fig. 3 Ref. 222), and the above step comprises excluding the use of the defective portion of the memory in storing the linked list (Fig. 1b, skip).

As to claim 15, Kim discloses the invention as claimed above. Kim further discloses wherein the memory being tested in the above step is a packet buffer for data storage (Fig. 2 Ref. 180)

As to claim 16, Kim discloses the invention as claimed above. Kim further discloses wherein the above step of updating is performed before the BIST performed in the above is completely through with the entirety of the memory (Fig. 3 Refs. 223 and 245 and col. 6 lines 36-45).

As to claim 17, Kim discloses the invention as claimed above. Kim further discloses after performing the step of updating, continuing the BIST in the step to identify a second defective portion of the memory (Fig. 3 Ref. 223); and updating the linked list to remove from the linked list the entry of the linked list corresponding to the identified second defective portion of the memory (Fig. 3 ref. 203)

As to claim 18, Kim discloses the invention as claimed above. Kim further discloses wherein the electronic device comprising the memory is a network switch (col. 1 lines 11 and 23-24).

As to claim 19, Kim discloses a method for generating a linked list (col. 2 lines 8+ and Fig. 2 Ref. 170) corresponding to a memory in an electronic device (col. 1 line 23), comprises forming a linked list (Fig. 1b) for the memory, wherein the linked list

comprises a plurality of entries (Fig. 1b) each having a first pointer field and a second pointer field (Fig. 1b) , the first pointer field for storing a pointer to a corresponding portion of the memory and the second pointer field for storing a pointer to another entry of the linked list; performing a built-in self test (BIST) (Fig. 2 Refs 172 and 182) on the memory to identify at least one defective portion of the memory; and updating the linked list to remove from the linked list the entry of the linked list corresponding to the identified defective portion of the memory, so that none of the entries of the updated linked list comprises a pointer in the second pointer field that points to the entry corresponding to the identified defective portion (Fig. 3 and col. 6 lines 36-44).

As to claim 20, Kim discloses the invention as claimed above. Kim further discloses wherein the electronic device comprising the memory is a network switch (col. 1 lines 11 and 23-24).

As to claim 21, Kim discloses the invention as claimed above. Kim further discloses wherein the memory being tested in the BIST step is a packet buffer for data storage (Fig. 2 Ref. 180) .

As to claim 22, Kim discloses a method for generating a linked list (col. 2 lines 8+ and Fig. 2 Ref. 170) corresponding to a memory (col. 1 line 23), comprises forming a linked list (Fig. 1b) for the memory, wherein the linked list comprises a plurality of entries each having a first pointer field and a second pointer field (Fig. 1b), the first

pointer field for storing a pointer to a corresponding portion of the memory and the second pointer field for storing a pointer to another entry of the linked list; performing a built-in self test (BIST) (Fig. 2 Refs 172 and 182) on the memory to identify a first defective portion of the memory; updating the linked list to remove from the linked list the entry of the linked list corresponding to the identified first defective portion of the memory (Fig. 3 and col. 6 lines 36-44); after the above step is completed, continuing the BIST to identify a second defective portion of the memory (Fig. 3 refs. 223 and 245); and updating the linked list to remove from the linked list the entry of the linked list corresponding to the identified second defective portion of the memory (Fig. 3 and col. 6 lines 36-44).

Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

2. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

3. When responding to the office action, Applicant is advised to clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. He or she must also show how the amendments avoid such references or objections. See 37 C.F.R. ' 1.111(c).

4. When responding to the office action, Applicants are advised to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist examiner to locate the appropriate paragraphs.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hong Kim whose telephone number is (571) 272-4181. The examiner can normally be reached on M-F 9:00 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Kim can be reached on (571) 272-4182. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 whose telephone number is (571) 272-2100.

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6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

7. **Any response to this action should be mailed to:**

Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

or faxed to TC-2100:
571-273-8300

Hand-delivered responses should be brought to the Customer Service Window (Randolph Building, 401 Dulany Street, Alexandria, VA 22314).

HK
Primary Patent Examiner
July 16, 2006

